TITLE OF INVENTION: APPARATUS AND METHOD FOR DRIVING A PULSED LASER DIODE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

44163 7590 02/06/2009

CYR & ASSOCIATES, P.A. 605 U.S. Highway 169 Suite 300

Plymouth, MN 55441

EXAMINER

VAN ROY, TOD THOMAS

ART UNIT PAPER NUMBER

2828

DATE MAILED: 02/06/2009

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONTERMATION NO.

 10/751,301
 01/02/2004
 David M. Giorgi
 09/70/2011-US-U1
 8801

 APPLN.TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEES) DUE
 DATE DUE

 nonprovisional
 YES
 \$755
 \$300
 \$0
 \$1055
 05/06/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

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If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	ed below or directed otl	ng the Patent, advance on perwise in Block 1, by (rders and notification of a) specifying a new co	of maintenance fees rrespondence addre	will be ss; and/o	mailed to the current r (b) indicating a sepa	correspondence address as arate "FEE ADDRESS" for
CURRENT CORRESPOND		Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
CYR & ASSO 605 U.S. Highw Suite 300	ay 169	/2009) : :	C hereby certify that states Postal Service addressed to the M ransmitted to the US	ertificat this Fee(with su ail Stop PTO (57	e of Mailing or Trans (s) Transmittal is being fficient postage for fir ISSUE FEE address (1) 273-2885, on the d	mission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.
Plymouth, MN 5	55441						(Depositor's name)
							(Signature)
			l				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENT	OR	ATTC	DRNEY DOCKET NO.	CONFIRMATION NO.
10/751,301 TITLE OF INVENTION	01/02/2004 E: APPARATUS AND M	ETHOD FOR DRIVING	David M. Giorgi A PULSED LASER I	NODE	00	970.0011-US-U1	8801
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	E PREV. PAID ISS	UE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0		\$1055	05/06/2009
EXAM	IINER	ART UNIT	CLASS-SUBCLASS	7			
VAN ROY, TO	OD THOMAS	2828	372-025000	_			
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha B/122) attached. ication (or "Fee Address 22 or more recent) attach ND RESIDENCE DAT. less an assignee is ident h in 37 CFR 3.11. Comp	mge of Correspondence "Indication form and. Use of a Customer A TO BE PRINTED ON		o to 3 registered pat attively, ngle firm (having as or agent) and the na uttorneys or agents. be printed. type) e patent. If an assignment.	ent attorn a memb mes of u If no nan	per a 2	ocument has been filed for
Please check the appropr	iate assignee category or	categories (will not be p	rinted on the patent):	☐ Individual ☐	Corporat	ion or other private gro	oup entity Government
Advance Order -	o small entity discount j	th. Payment of Fec(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to be point Account Number (exclose an extra copy of this form).					
 Change in Entity Sta Applicant claim 	tus (from status indicate is SMALL ENTITY stati		☐ b. Applicant is no	longer claiming SM	ALLEN	TITY status. Sec 37 Cl	FR 1.27(g)(2).
							ne assignee or other party in
Authorized Signature		nes I acin and I rademar	come.	Date			
Typed or printed name			Registration No.				
This collection of inform an application. Confiden submitting the complete this form and/or suggests Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this bu 'irginia 22313-1450. DC k13-1450.	CFR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain 1.14. This collection is depending upon the ir e Chief Information Of COMPLETED FORMS	or retain a benefit b estimated to take I' idividual case. Any ficer, U.S. Patent ar i TO THIS ADDRE	the pub 2 minute commen d Trader SS. SEN	dic which is to file (and s to complete, including ts on the amount of the mark Office, U.S. Dep. D TO: Commissioner	d by the USPTO to process) ng gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



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10/751,301	01/02/2004	David M. Giorgi	00970.0011-US-U1	8801		
44163 75	90 02/06/2009		EXAMINER			
CYR & ASSOCI	ATES, P.A.	VAN ROY, TOD THOMAS				
605 U.S. Highway	169	ART UNIT	PAPER NUMBER			
Suite 300 Plymouth, MN 554	141		2828			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 200 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 200 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/751,301 GIORGI ET AL. Notice of Allowability Examiner Art Unit TOD T VAN ROY 2828 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to Remarks filed 10/28/2008. The allowed claim(s) is/are 1-13,18 and 20-23. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other . /Minsun Harvey/

Supervisory Patent Examiner, Art Unit 2828

Application/Control Number: 10/751,301

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DETAILED ACTION

Response to Arguments

Applicant's arguments, see Remarks, filed 10/28/2008, with respect to claim 1 have been fully considered and are persuasive. The rejection of the claims has been withdrawn.

The Examiner notes agreement with the Applicant that the capacitors of Duke are not taught to be 'operatively' charged.

Allowable Subject Matter

Claims 1-13, 18, and 20-23 are allowed.

The following is an examiner's statement of reasons for allowance:

Claim 1 is believed to be allowable as the prior art failed to disclose or make obvious the combination of the stated capacitive storage element energy and voltage relationships, as they relate to being operatively charged in a switched current path, and additionally operatively discharge across a laser diode. The prior art was found to teach similar circuits, as have been cited, but did not teach the stated relationships and most notably the relationships to hold true when operatively charged, and subsequently discharging the energy to the laser diode. For these reasons the claims are believed to be in condition for allowance.

Please see the previous office actions for the reasons of allowance for claims 18 and 20.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably Application/Control Number: 10/751,301

Art Unit: 2828

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TOD T. VAN ROY whose telephone number is (571)272-8447. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minsun Harvey can be reached on (571)272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TVR/

/Minsun Harvey/

Supervisory Patent Examiner, Art Unit 2828

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